Development of Maintenance Form Oracle FLEXCUBE Investor Servicing Release 14.0.0.0.0 [May] [2018]





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1. Preface

This document describes Maintenance Screens in FLEXCUBE and the process of designing a simple Maintenance form using Oracle FLEXCUBE Development Workbench for Universal Banking

1.1 Audience

This document is intended for FLEXCUBE Application developers/users that use development Workbench to develop various FLEXCUBE components.

To Use this manual, you need conceptual and working knowledge of the below:

| Proficiency | Resources |
|--|-------------------------------|
| FLEXCUBE Functional Architecture | Training programs from Oracle |
| | Financial Software Services. |
| FLEXCUBE Technical Architecture | Training programs from Oracle |
| | Financial Software Services. |
| FLEXCUBE Screen Development | 04-Development_WorkBench |
| | _Screen_Development-I.docx |
| Working knowledge of Web based applications | Self Acquired |
| Working knowledge of Oracle Database | Oracle Documentations |
| Working knowledge of PLSQL & SQL Language | Self Acquired |
| Working knowledge of XML files | Self Acquired |

1.2 Related Documents

<u>04-Development_WorkBench_Screen_Development-I.docx</u> <u>05-Development_WorkBench_Screen_Development-II.docx</u>

2. Introduction

2.1 How to use this Guide

The information in this document includes:

• Chapter 2, "Introduction"

- <u>Chapter 3 , "Overview of Call Form"</u>
- <u>Chapter 4</u>, "Screen Development"
- <u>Chapter 5 , "Generated Units"</u>
- <u>Chapter 5 , "Extensible Development"</u>

3. Overview of Maintenance Screen

Maintenance Function Id's are used for storing maintenance data which are required for processing of any contracts, batches or for any other maintenance which are dependent on this

Example: Customer maintenance screen

If any customer wants to use the service of a bank, details about the customer will have to be maintained in the system .This will be maintenance data which will be required for other maintenances (creating account for the customer) as well as for transaction processing (debiting of customer account)

Business logic for a maintenance function id would be provided by the Development Workbench generated files .Most of the cases, system provided logic would be sufficient .Extra validations can be coded in the hook packages by the developer.

4. Screen Development

Design and development of a Maintenance function id is similar to any other function Ids. This section briefs the steps in designing a Maintenance screen. STDCINF is sample function id used for demonstration in this document

For detailed explanation, refer the document: <u>**4**-Development_WorkBench</u> <u>Screen_Development-I.docx</u>

4.1 Header Information

Provide the header information as shown in the figure.

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|---|---------------------------|---------------------------------|----------|
| owser + | | Windows Options S | Sign Out |
| ction Generation | | | - |
| | | G 🗵 🔳 🖓 | 7 14 1 |
| Action None - | Function Type Parent - | Function Category Maintenance - | |
| Function Id | Parent Function | Header Template None - | |
| Save XML Path | Parent Xml | Footer Template None - | |
| ch | | | |
| Preferences DataSource ListOf/alues DataBlocks Screens FieldSets Actions CallForms LaunchForms Summary | | | |

Fig 12.1: Providing Header Information for Maintenance Screen

- For new screen select action As New.
- Enter Function ID \rightarrow STDCIFD
- Function Type \rightarrow Parent
- Function Category \rightarrow Maintenance
- Parent Function Id \rightarrow None
- Parent Xml \rightarrow None
- Header Template \rightarrow None (Only for Process flow screens)
- Footer Template \rightarrow Maint Audit

| for Universal Banking | Windows | | OUSER Sign Out |
|------------------------|---------------------------------|--|-------------------|
| | All states | | |
| | 6 | | 9 4 4 |
| Function Type Parent - | Function Category Maintenance - | Save (CTRL + | 2 |
| Parent Function | Header Template None - | | |
| Parent Xmi | Footer Template None - | | |
| | | | |
| | Parent Function | Function Type Parent - Function Category Maintenance - Parent Function Header Template None - | Windows Options |

Fig 12.2: Save icon used for saving the radxml

User can save work at any point in time. Click the save icon on top right for the same .In order to work again with it select action as Load and load radxml from the hard disk path

| ORACLE FLEXCUBE Developm Browser - | ent Workbench for Universal | Banking | DEMOUSER Windows Options Sign Out |
|--|-----------------------------|--|---|
| Function Generation | | | |
| Action New • Function Id STDCIFD Save XML Path DrRADTOOL Search | Information | Function Type Parent Parent Function Parent Xmi | Function Category Mainlananca + Header Template None + Foolar Template None + |
| Preferances DalaSource ListOfralues Soreins FreidSols Actions CallForms Summary | File Saved | or Description Error Code 0% of DownLoadFile from 10.184.132.100 Completed S File Download Do you want to open or save this file? Do you want to open or save this file? Manne: RAD.21P Type: WinRAR 21P archive From: 10.184.132.100 Coen Save Cancel While files from the Internet can be useful, some files can potentially ham your computer. If you do not that the source, do not open or save this file. What it is man? | |

Fig 12.3: Saved File Information page

Note the following while providing header information for Maintenance screen

i) Naming Convention:

The third letter of the function id has to be D. Ideally the function id name should have 8 characters.

ii) Footer Template

Make sure that the master data source has the audit columns if footer template is provided as Maint log.

Refer <u>04-Development_WorkBench_Screen_Development-I.docx</u> for detailed explanation

4.2 Preferences

- Details entered in Preferences are used in generating INCS for SMTB_MENU, SMTB_FUNCTION_DESCRIPTION and SMTB_ROLE_DETAILS.
- **Control String** → Developer needs to select the actions which should be available for this screen in FLEXCUBE.

| Function Generation Image: Constraint of the state | - 7 - | | | Window | | | | | | | pment Wo | Browser - |
|--|------------|------------|-----------|----------------|---|--|---|---|--|--|----------|---|
| Action New Function Type Parent Function Category Maintenance Function Id STDCIFD Parent Function Header Template None Save XML Path D:RADTOOL Parent Xml Footer Template None Preferences Image: Preferences Image: Preferences Image: Preferences Image: Preferences Static Maintenance Image: Preferences Image: Preferences Preferences Image: Preferences Image: Preferences Static Maintenance Image: Preferences Image: Preferences Image: Preferences Image: Preferences Image: Preferences Preferences Image: Preferences Image: Preferenc | E 7 U | × E | | | | | | | | | | unction Generation |
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| DataSource DataSource DataSource Static Maintenance Static Maintenance DataBolicoks Q Auto Authorization Branch Program Id | 4 | | | | | | | | | erences | Pref | sarch |
| Field Sets Pield Log Required SVN Repository URL Actions Multi Branch Access Transaction Block Califorms Excel Export Required Transaction Field Summary Excel Export Required Transaction Field | | | 3 | • | atic Maintenance | on Id Id Id Id Id Id Id Id Id Id Id Id Id I | Module Description Branch Program Id Process Code SVN Repository URL Transaction Block Name Transaction Field | | ogging Required who Authorization 'ank Modifications Tield Log Required Auti Branch Access | Logging Logging Logging Tank Mo Field Lo Multi Bra | | DataSource DistOrAlues DataBlocks Screens HeldSets CaliForms CaliForms LaunchForms |
| | String + - | rol String | a constru | | | | | | | | _ | |
| Function Id Module * Module Description STDCIFD ST >1 Static Maintenance | _ | | on | ne Description | | I St | | | 2 | | | |

Note the following points while providing details in Preferences screen

i) Control String

REVERSE, ROLLOVER, CONFIRM, LIQUIDATE, HOLD operations are not applicable for maintenance screens.

ii) Defining Browser Menu Tree

Browser menu tree will be defined in the script generated for *smtb_function_description*.

The following labels has to be maintained for generation of proper script Main Menu: LBL_{function id}_MAIN_MENU Sub Menu 1: LBL_{function id}_SUB_MENU_1 Sub Menu 2: LBL_{function id}_SUB_MENU_2 Description: LBL_{function id}_DESC *Example: For STDCIFD, following labels has to be maintained* LBL_STDCIFD_MAIN_MENU, LBL_STDCIFD_SUB_MENU_1, LBL_STDCIFD_SUB_MENU_2, LBL_STDCIFD_DESC

Refer <u>Development_WorkBench_Screen_Development-I.docx</u> for detailed explanation on preferences

4.3 Data Sources

- Right Click on Data Sources; click on Add. Add table window gets opened.
- If user knows the exact table name, he can enter name directly; else go to List Of values to get the list of tables available. Select the required table from the list.

| Browser . | lopment Workbench for Universal Banking | DEMOUSER Windows Options Sign Out |
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| Action New • Function Id STDC/FD Save XML Path D1RADTO | Function Type Parent Parent Function L Parent Zml | Function Category Maintananaa • Header Temptale Hone • Fooler Temptate None • |
| Search | AddTable | <u>×</u> |
| Preferences DalaSource ListOfvalues DalaBlocks | Table Name FT X | arent Relation Type * |
| FieldSals Actions CallForms LaunchForms Summary | Search Reset | |
| | Table Name * STTM_CUSTOMER STTM_CUSTOMER_ALTERNATE_BRANCH STTM_CUSTOMER_ALAT_EBRANCH STTM_CUSTOMER_CAT STTM_CUSTOMER_INAM_DETAIL STTM_CUSTOMER_NAM_MASTER STTM_CUSTOMER_PARAM STTM_CUSTOMER_PRE_MAGE STTM_CUSTOMER_SOURCE_DETAILS STTM_CUSTOMER_SRO_DETAILS STTM_CUSTOMER_SRNO STTM_CUSTOMER_INNUSED STTM_CUSTOMER_VINUSED STTM_CUSTOMER_VINUSED | |

Fig 12.5: Adding Data Sources for the Function id

- Select Master as Yes if added data source is Master Data Source for the screen. Every function id should have one master data source..
- **Primary Key columns** (i.e. Pk Cols) and **Primary Types** (i.e. Pk Types) are mandatory. If it is already maintained in user schema in STTB_PK_COLS it will populated automatically otherwise user needs to enter values without fail. If user misses Pk cols and Pk Types package generation will fail. *Note: Master Data Source cannot have any parent.*

| CRACLE FLEXCUBE Development Workbe | nch for Universal Banking - Windows Internet Explorer | And Add Manual State | | | | | x |
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| ORACLE FLEXCUBE Develop | oment Workbench for Universal Banking | | | 0 | DEMO | USE | R |
| Browser - | | | Windows | s Optio | ns Si | gn Out | |
| Function Generation | | | | | | - | . × |
| | | | | 2 | I 7 | (a) | \$ |
| Action New - | Function Type Parent | | Function Category Maintenance | • | | | |
| Function Id STDCIFD | Parent Function | | Header Template None 👻 | | | | |
| Save XML Path D:RADTOOL | Parent Xml | | Footer Template None | • | | | |
| Search | Data Source Details | | | | | - 🥱 | ^ |
| Preferences DataSource STTM_CUSTOMER ListOVAlues DataBlocks Screens FieldSets Actions CallForms LauchForms Summary | Data Source Master Relation Type Mutt Record PK Cols CUSTOMER_NO PK Types WARCHAR2 | Parent Relation Where Clause Default Order By Type | Normal Mandatory | | | | |

Fig 12.6: Providing master Data Source Properties

• Right Click on Added Table (STTM_CUSTOMER) to add fields to the table. Popup window gets opened with available columns in data source. Select the required fields and click ok. Selected will get added to the Data Source Tree.

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| Action New - | Function Type Parent | • | | Function Category Maintenan | e 🕶 | | | | |
| Function Id STDCIFD | Parent Function | | | Header Template None | • | | | | |
| Save XML Path D:RADTOOL | Parent Xml | | | Footer Template None | • | | | | |
| Search | Data Source Details | | | | | | - 4 | 1 | 9 ^ |
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Fig 12.7: Including Data Source Fields for the Data Source

| Function Generation Action New • Function Id STDOIFD | Function Type: Parent | | | | | | |
|--|-----------------------|-----------|---|--------------------------|---------------------------------|-----|---------|
| Function Id STDCIFD | Function Type Parent | | | | | - | |
| Function Id STDCIFD | Function Type Parent | | | | | | 8 7 Q < |
| | | | | | Function Category Maintenance • | | |
| | Parent Function | | | | Header Templals None • | | |
| Save XML Path D/RADTOOL | Parent Xmt | | | | Foolar Template Nona | • | |
| Search Select F | ields | | × | | | | + - 9) |
| Preferances | | | | Parent | | | |
| G DalaSource | CUSTOMER NO | VARCHAR2 | | Relation | | 000 | |
| ListOfvalues | CUSTOMER_TYPE | CHAR | | Where Clause | | 20 | |
| DataBlocks | CUSTOMER_NAME1 | VARCHAR2 | | Delaull Order By Type | Normal • | | |
| FieldSats | ADDRESS_LINE1 | VARCHAR2 | | 10230 | T Mandalory | | |
| CaliForms | ADDRESS_LINE3 | VARCHAR2 | | | | | |
| CaunchForms [1] | ADDRESS_LINE2 | VARCHAR2 | | | | | |
| Summary | ADDRESS_LINE4 | VARCHAR2 | | | | | |
| 2 | COUNTRY | VARCHAR2 | | | | | |
| 8 | SHORT_NAME | VARCHAR2 | | | | | |
| 2 | NATIONALITY | VARCHAR2 | H | | | | |
| | LANGUAGE | VARCHAR2 | | | | | |
| | | 10 10 1 | | | | | |
| | | Ok Cancel | | | | | |

Fig 12.7: Selecting Data Source Fields for the Data Source

Data Source Field Properties:

Only max length can be modified by the developer in data source field properties. Rest will be defaulted from table definition

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| | | | | | | Las | | VV | |
| Action New · | | Function Type Parent | - | | Function Category Maintenan | ce • | | | |
| Function Id STDCIFD | | Parent Function | | | Header Template None | • | | | |
| Save XML Path DIRADTOOL | Action New Function Type Parent Function Type Parent Function Type Parent Parent Function Data Source Field Details rences ISource ISOURE ISOURE ISOURE ISOURCE ISOU | | | Footer Template None | • | | | | |
| earch | Data Source Field | Details | | | | | Refr | rsh 🗕 G | 9 |
| Preferences | Column Name | CUSTOMER_NO | | Data Type | VARCHAR2 | | | | |
| | Block Name | | | MaxLength | 9 | | 1 | | |
| Action New Action New Function Id STDC/FD Function Id STDC/FD Save XML Path D/RADTOOL Parent Xml Data Source Field Details Preferences Column Name Block Name CustomER_TYPE CUSTOMER_NO | | Upload Table Column | Not Required in | - |] | | | | |
| COUNTRY | | | | | | | | | |
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Data model of a single function id would include multiple tables .All the tables needs to added in the function id. Note the following while adding child data sources

Adding Child Data Source:

- Select Multi Record value as Yes if child data source is Multi record table.
- Child Data Source should always be associated with a parent.
- Relation is mandatory between parent and child. While giving relation, parent data source should come in left side of the relation.

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| Action New Function Id STDCIFD Save XML Path D/RADTOOL | Parent Fu | n Type Parent - Indion - | | Function Category Maintenance • Header Template None • Footer Template None | | |
| rch | Data Source Details | | | | | + - 9 |
| Preferences Preferences CalaSource Preferences CalaSource Customer Custome | Data Source STTM_CUST_C Master No • Relation Type One To Many Multi Record Yes • PK Cols • GROUP_D-CL PK Types • WRCHAR2-VA Upload Table | JSTOMER_NO | Parent Relation Where Clause Default Order By Type | STTM_CUSTOMER STTM_CUSTOMER_NO | STDD | |

Fig 12.7: Providing properties for Child Data Source

Note: A data source cannot be parent to itself.

Note the following while adding data sources:

- i) If the data source is designed with relation type as 1: N with its parent, then it should have at least one more Pk col than its parent (assuming relationship is based on Pk cols).
- ii) Master data source needs to have the audit columns if footer template is Maint audit; but those should not be added to data source fields as system will handle it

Refer <u>Development_WorkBench_Screen_Development-I.docx</u> for detailed explanation on data sources

4.4 Data Blocks

• Block Name should start with BLK_<short Name equivalent to data source but not exactly same as Data Source name>.

| Add Block | | × |
|------------|-----------------------------|---|
| Block Name | BLK_CUSTOMER | |
| | Ok Cancel | |
| | | |
| Fig 12.8 | : Creating a new Data Block | - |

- Select Parent block if added block is not Master Block.
- Select Multi Record (Yes/No) based on this value, available data sources will displayed in data source available text area.

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| | | | Options | - |
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| Action New 👻 | Function Type Parent | Function Category Maintenance 👻 | | |
| Function Id STDCIFD | Parent Function | Header Template None - | | |
| Save XML Path D:\RADTOOL | Parent Xml | Footer Template None | | |
| Search Blo | lock Properties | | + | - 🛛 🗐 🤺 |
| Preferences DataSource STIM_CUSTOMER STIM_CUST_GROUP ListOValues DataBlocks BLK_CUSTOMER Screens FieldSets Actions CallForms Summary | Block Name Block Title Parent Relation Type Block PK Fields Datasource Available STTM_CUSTOMER Fig 12.9: Providing properties for | XSD Node Annotation Master Block Mutili Record Block Type Datasource Added | | |

• Select the required data source and click move button to attach Data Source to the block

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| Action New 👻 | | Function Type Parent | • | | Function Category | Maintenance 👻 | | | | |
| Function Id STDCIFD | | Parent Function | | | Header Template | None 🔻 | | | | |
| Save XML Path D:\RADTOOL | | Parent Xml | | | Footer Template | None 👻 | | | | |
| Search | Block Properties | | | | | | | + - | x 9 | ^ |
| Preferences DataSource STTM_CUSTOMER STTM_CUST_GROUP ListOfValues DataBlocks BLK_CUSTOMER Screens FieldSets Actions CallForms LaunchForms Summary | Block Title Parent | SLK_CUSTOMER | Available | XSD Node XSD Node Annotation Master Block Multi Record Block Type Datasour STTM_CUSTOMER | Customer Yes V No V Normal V Ce Added | | | | | |

Fig 12.10: Attaching Data Sources to Data Block

Adding multi record data source to data block:

User on selecting Multi record Yes in data block properties all the data sources with multi record Yes will be populated. *Multi Data Source once used to one block won't available for reuse where as single record data source can be used in multiple blocks*

Select Block Fields:

- Right click on added block. Select Fields window will get opened. Developer needs to check the right side check box to add the required fields.
- **Field Name**: It should not be the same as column name .Special characters are also not allowed in the field name (including underscore and space)
- Label Code: It will be automatically populated based on field name.

| rowser - notion Generation Action New - | | | | | | | |
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| Action New - | | | | | | | |
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| | | Function Type Parent | * | | Function Category Mainlenance | | |
| Function Id STDCIFD | | Parent Function | | | Header Templale None - | | |
| Save XML Pain DORADTOOL | | ParentXml | | | Fooler Template None | • | |
| irch | Select Fields & Add UI Fields | | | | × | + | - 🔊 🕻 |
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| Preferences | DataSource lields Of Fields | , | | | omer | | |
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| STTM_CUST_GROUP ListOfValues | Column Name | Field Name | Label Code | ^ | • • | | |
| DalaBlocks | CUSTOMER_NO | CUSTNO | LBL_CUSTNO | | nal 👻 | | |
| BLK_CUSTOMER | CUSTOMER_TYPE | CUSTTYPE | LBL_CUSTTYPE | | | | |
| Screens FieldSels | CUSTOMER_NAME1 | CNAME | LBL_CNAME | | led | | |
| Actions | ADDRESS_LINE1 | ADDR1 | LBL_ADDR1 | | | | |
| CallForms | COUNTRY | CNTY | LBL_CNTY | | | | |
| LaunchForms | | NLTY | LBL_NLTY | | | | |
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| | | | | Ok C | Cancel | | |

Fig 12.11: Adding Block Fields to Data Block

Refer <u>Development_WorkBench_Screen_Development-I.docx</u> for detailed explanation on data blocks and block field properties

4.5 Screens

- Right click on Screens node to add a new screen
- Screen Name should start with CVS_<Name>...
- By default screen are divided into 3 parts.
- One Main Screen is Mandatory.
- Tabs can be defined on any of the screen portions as required
- User can add sections to tabs.
- Each section can be divided into partitions.

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| Action New - | Function Type Parent Function Category Maintenance Functio | | | | |
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| Save XML Path D:\RADTOOL | Parent Xml Footer Template None | • | | | |
| Search | Screen Details | | - Aï |) 🗔 (| 9 |
| | Screen Name CVS_MAIN | | + | _ | |
| Difference FieldSets Actions CallForms | Argument Name Source Block Source Field Argument Value Target Block Target Field | A | ctive | ^ | |
| 🔁 LaunchForms | | | | * | |

Fig 12.12: Providing properties to new Screen

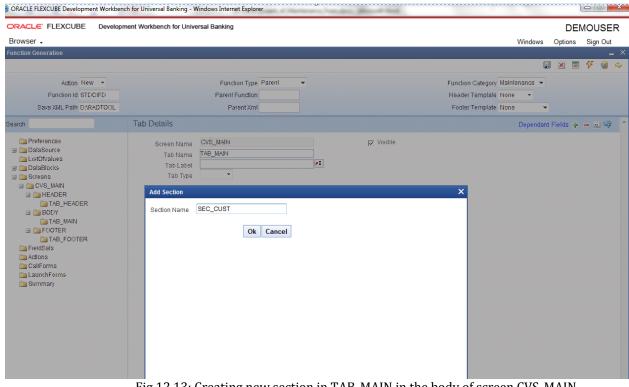


Fig 12.13: Creating new section in TAB_MAIN in the body of screen CVS_MAIN

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| 🖃 🚞 TAB_MAIN | | RT2 | | 50 🗸 | | | |
| E SEC_CUST | | | | | | - | |
| TAB_FOOTER FieldSets Actions LaunchForms Summary | | | itions for the Sectic | | | | |

4.6 Field Sets

A group of fields can be grouped together in a Field set which can be placed together in the screen

- Field Set Name should start with FST_<>.
- Select the Block adding to field set.
- All fields available to the block will be displayed in to the data block fields text area. Move fields from data block fields to Field set fields.
- The order of fields in *field set fields* will reflect in the screen as well

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|--|---|--|----------------------------|----------|---|
| rowser - | | | W | indows O | ptions Sign Out |
| nction Generation | | | | | _ |
| | | | | | x 🗉 🎸 🧃 |
| Action New 💌 | Function Type Parent | | Function Category Maintena | ance 👻 | |
| Function Id STDCIFD | Parent Function | | Header Template None | • | |
| Save XML Path D:\RADTOOL | Parent Xml | | Footer Template None | • | |
| arch | Fieldset Properties | | | | - 🔊 |
| Preferences DataSource ListONAlues DataBlocks Streens FieldSets FST_CUST1 FST_CUST2 Actions CallForms LaunchForms Summary | Fieldset Name FST_CUST1 Fieldset Label BLK_CUSTOMER Mutil Record No View Type Single Fieldset Height CUSTTYPE CNAME ADDR1 CNTY LANG | Screen Name Screen Portion Tab Name Section Name Partition Name Number Of Rows | MAIN Y | | łorizontal Fieldset keadOnly lavigation Button Tisible |



| | nt Workbench for Universal Banking | DEMOUSE |
|---|--|-------------------------|
| rowser 🗸 nction Generation | | Windows Options Sign Ou |
| Action New Function Id STDCIFD Save XML Path D'IRADTOOL arch Preferences DataSource ListOfValues DataBlocks DataBlocks FieldSets FieldSets FieldSets CallForms CallForms Summary | Function Type Parent Parent Function Parent Xmi Fieldset Name Fieldset Label Data Block Multi Record No View Type Fieldset Height Data Block Fields CNTY NLTY LANG | |

• Select the screen portion (Header/Body/Footer) where this field set has to be placed. Select remaining details like tab, section and partition.

| ORACLE FLEXCUBE Development Workbenc | h for Universal Banking - Windows Internet Explorer | - | a mad | 1000 | |
|--|--|------------------------|--------|---------------------------------------|--|
| ORACLE FLEXCUBE Developm Browser | ent Workbench for Universal Banking | | | Wind | DEMOUSER ows Options Sign Out |
| Function Generation | | | | · · · · · · · · · · · · · · · · · · · | _ X |
| | | | | | 🖫 🗶 🗏 7 🧐 🔿 |
| Action New - | Function Type Parent | | | Function Category Maintenance | ▼ |
| Function Id STDCIFD | Parent Function | | | Header Template None 👻 | |
| Save XML Path D:\RADTOOL | Parent Xml | | | Footer Template None | - |
| Search | Fieldset Properties | | \sim | | - K 🦃 🔺 |
| Preferences DataSource ListOfValues DataBlocks DataBlocks DataBlocks For Stredss FST_CUST1 FST_CUST2 Actions CallForms LaunchForms DataBlocks | Fieldset Name FST_CUST1 Fieldset Label Data Block BLK_CUSTOMER Muth Record No View Type Single Fieldset Height Data Block Fields | Screer Ta Sectio | | | Horizontal Fieldset ReadOnly Navigation Button Visible |
| 🚞 Summary | CNTY NLTY | | CUSTNO | | |
| | LANG | | CNAME | · · · · | |
| | | DD . | ADDR1 | | |
| | | 44 | | | |
| | | | | | |

Fig 12.15: Providing details where Field Set has to be placed

Once fields are added to field set, developer can check the preview of the designed screen. Right click on Screen Name and click on Preview.

| 🔶 Main | | |
|---------------------|----------------------|------|
| 🖹 New 🦻 Enter Query | | |
| Customer No | | |
| Name | | |
| Туре | | |
| Address | | |
| | | |
| Maker | Date Time: | |
| Checker | | |
| | Date Time: | Exit |
| Mod No | Record Status | |
| | Authorization Status | |
| | | |
| | | |

Fig 12.16: Preview of the designed Screen

Adding Multi entry block to field set.

- On selecting a multiple block, Multi Record Property will be defaulted to Yes..
- In case of Multi record, View type can be either Single or Multiple (By Default).

| E New E Enter Query | |
|--|------|
| Customer No Name Type Address | |
| ■ ■ ■ Go to Page | |
| Group Id Customer No Relation | |
| Maker Date Time: Checker Date Time: | Exit |
| Mod No Record Status Authorization Status | LAIL |

Below image shows a multiple view multi record field set



• For multi record single view navigation button should be checked.

| RACLE' FLEXCUBE Develop | ment Workbench for Univ | ersal Banking | | | | | C | DEMOUS |
|--|-------------------------|----------------------|----------|------------|-----------------|------------------------|-----------|-----------------|
| rowser + | | | | | | Windo | ws Option | ns Sign Ou |
| nction Generation | | | | | | | | |
| | | | | | | | X | 🗏 7 🧐 |
| Action Load | | Function Type Parent | | | Functio | n Category Maintenance | - | |
| Function Id STDCIFD | | Parent Function | | | | r Template None 👻 | | |
| Save XML Path STDCIFD_RAL | BROWSE | Parent Xml | | | | r Template Maint Audit | • | |
| arch | Fieldset Propertie | .S | | | | | | - 🧟 🗳 |
| 🗀 Preferences | FieldsetName | FST_CUST2 | 80 | reen Nam | CVS_MAIN | • | I Horiz | zontal Fieldset |
| 🗉 🚞 DataSource | Fieldset Label | - | | een Portio | | • | r⊓ Read | |
| | Data Block | BLK_GROUP - | | Tab Nam | | • | | gation Button |
| CUSTOMER_NO CUSTOMER_TYPE | Multi Record | Yes 🔻 | | ction Nam | - | • | Visib | |
| CUSTOMER_NAME1 | | Single 🔹 | | tition Nam | | • | I Hold | |
| ADDRESS_LINE1 | Fieldset Height | | | er Of Row | | | | |
| COUNTRY | ricidoctricigit | | Numb | er of Row | | | | |
| | | | | | | | | |
| LANGUAGE STTM_CUST_GROUP | | Data Block Fields | 1 | | FieldSet Fields | Subpartition Name | | |
| GROUP_ID | | | | | | | | |
| CUSTOMER_NO | | | | GROU | - | • | | |
| Carl RELATIONSHIP | | | | | _NO | • | | |
| ListOfValues | | | | E RELA | TION | - | | |
| DataBlocks | | | A | | | | | |
| B BLK_CUSTOMER BLK_GROUP | | | 44 | | | | | |
| Creens | | | | | | | | |
| CVS_MAIN | | | | | | | | |
| 🗄 🚞 HEADER | | | | | | | | |
| | | | | | | | | |
| 🖃 🚞 BODY | | | | | | | | |
| TAB_MAIN | | | | | | | | |
| TAB_MAIN | | | | | | | | |
| TAB_MAIN SEC_CUST SEC_GROUP | | | | | | | | |
| TAB_MAIN TAB_CCUST SEC_CUST SEC_GROUP FOOTER | | | | | | | | |
| TAB_MAIN | | | | | | | | |

Below figure shows the preview of a single view multi record field set

| 🔶 Main | | × |
|--|---------------------------------------|--------|
| 🗗 New 🔄 Enter Query | | |
| Customer No Name Type Address Group Id | | 1 of 1 |
| Customer No Relation Maker | Date Time: | |
| Checker | Date Time: | Exit |
| Mod No | Record Status Authorization Status | |

Fig 12.18: Preview for Single View Multi Record Field set

4.7 LOV

List Of values can be defined for the function id using LOV node

- To add LOV right click on List of Values Node. LOV Name should start with LOV_<name>. *Example: LOV_COUNTRY.*
- Enter valid query and click on populate button

| Function Generation | | | | | | | × |
|---|---|---|----------------------------------|------------------------|------------|-----|---|
| | | | | 🔚 🗶 | I 7 | 9 | ⇔ |
| Action Load | Function Type Pare Parent Function | nt 👻 | Function Catego Header Templa | Maintenance 👻 | | | |
| Save XML Path STDCIFD_RAI | BROWSE Parent Xml | | Footer Templa | ate Maint Audit 👻 | | | |
| Search | List Of Values Details | | | | - 2 | . 9 | ^ |
| Preferences DataSource STIM_CUSTOMER STIM_CUST_GROUP ListOfValues LoV_OCUNTRY | LOV Name • LOV_OCUNTRY LOV Query select country_code,descrip | otion from sttm_country where auth_stat = ' | A' and record_stat = 'O' | | Popula | te | |
| DataBlocks | Query Columns Data Type | Visible Reduction Field | Reduction Field Type | Reduction/Column Label | | * | |

Fig 12.19: Defining new LOV

| LOV | Query > | < |
|-----|--|---|
| | select country_code,description from sttm_country where auth_stat = 'A' and record_stat = 'O' | |
| | Ok Cancel | |

Fig 12.20: Providing LOV query

| Function Generation | | | | | | | | | - | . × |
|---|--------------------------------|--|--------------|--------------------------|-----------------------------|-------------------------------|------------|--------|------|-----|
| | | | | | | 8 | × | 1 | 9 | ¢ |
| Action Load - | | Function Type Parent | - | | Fu | nction Category Maintenance 👻 | | | | |
| Function Id STDCIFD | | Parent Function | | | н | eader Template None 👻 | | | | |
| Save XML Path STDCIFD_RAI | BROWSE | Parent Xml | | | F | ooter Template Maint Audit 🔹 | | | | |
| Search | List Of Values Details | | | | | | | | ai 🧐 | ^ |
| Preferences DataSource Government Th_CUSTOMER Government Th_CUST_GROUP ListOfValues COV_OCUNTRY | LOV Name * LO LOV Query set | V_OCUNTRY ect country_code, description | from sttm_cc | ountry where auth_stat : | = 'A' and record_stat = 'O' | 9 | < | Popula | ate | |
| DataBlocks | Query Column | s Data Type | Visible | Reduction Field | Reduction Field Type | Reduction/Column La | bel | | ^ | |
| Greens FieldSets | COUNTRY_CODE | VARCHAR2 - | Yes 👻 | Yes 👻 | TEXT - | LBL_CNTRY | × E | | | |
| Carlons Carlons | DESCRIPTION | VARCHAR2 - | Yes 👻 | Yes 🔻 | TEXT - | LBL_COUNTRYCD | × E | | | |
| CallForms LaunchForms Summary | | | | | | \smile | | | Ŧ | |

Fig 12.21: Providing LOV details

- Redn/Col Labels are mandatory. If user won't provide will get error on click of LOV button after deployment in FLEXCUBE
- After defining LOV go to block and corresponding field where the LOV has to be attached.

Block Field Properties to attach LOV to the field

- **Display Type:** Select display type as Lov.
- Lov Name: Select the required Lov name from the list of all defined LOV's.
- Click on return fields tab. The result fields maintained in the LOV query will be populated on click of *Default from Lov Definition* button
- Select the desired field (and its block)to which the result of the LOV query should be defaulted

• If return field is not required to be defaulted to any field in the screen, return field value can be left blank

| Function Generation | | | _ × _ |
|--|--|--|-----------|
| | | III 🗶 | 🗏 7 🧃 🔿 |
| Action Load 👻 | Function Type Parent | Function Category Maintenance 👻 | |
| Function Id STDCIFD | Parent Function | Header Template None 👻 | |
| Save XML Path STDCIFD_RAL | BROWSE Parent Xml | Footer Template Maint Audit 👻 | |
| Search | Block Field Properties | | - 🛛 🗔 🌍 🔺 |
| Preferences DataSource ListOvAuses ListOvAuses DataBlocks BLCV_COUNRTY DataBlocks BLK_CUSTMOR CUSTNO CUSTNO CUSTNYPE CUSTNO ADDR1 CNTY NUTY | Field Name + CNTY Field Label LBL_CNTY FE DataSource STTM_CUSTOMER Column Name + COUNTRY Data Type + Varchar2 ~ Display Type Lov ~ Item Type Database Item ~ Parent Field ~ Related Block ~ Related Field LOV_COUNRTY ~ | Minimum Value Pop Maximum Value Upp Maximum Decimals VLOV TextArea Rows Req TextArea Columns Inpu Default Value Not | ble |
| LANG LANG LK_GROUP Screens FieldSets Califorms | Off Line LOV Name Fieldset Name Custom Attributes Events Bind Variables Return Fields Relate Return Fields Mapping Query Column | | finition |
| 🚘 LaunchForms 🔁 Summary | COUNTRY_CODE BLK_CUSTOMER DESCRIPTION BLK_CUSTOMER | CNTY | |
| | Fig 12.22: Attaching L0 | DV to a block Field | |

Use of Bind Variable

If the list of values should be based on any other field value from the screen, bind variables can be used.

Example:

Define lov as shown in below query; where clause should contain condition with '?'.

SELECT cust_ac_no, branch_code, ccy from sttms_cust_account where cust_no = ? and record_stat = 'O' and once_auth = 'Y' and ac_stat_de_post = 'Y'

In the block field, after selecting return fields, click on bind variables tab. Click on **Default from Lov Definition** button. New rows will be created depending on the number of bind variable provided in the LOV query. Select the bind filed in the screen (and its block) for the LOV. Data type of the field has also to be selected.

| Action Land | Function Type Parent | - | Function Category | lambinance - | | |
|---|--|--------------|--|--|--|-------|
| Function Id STDCMF | Parent Function | | Header Template | ione 💌 | | |
| Save XML Path DIRADTOOLS | Parent Xml | | Footer Template | laint Audit 💌 | | |
| arch | Block Field Properties | | | | | - 119 |
| Preferences DataSource DataSource LustOfNales LustOfNales LustOfNales LustOfNales LustOfNales LUSTNO DataBlods LUSTNE | Field Name CUSTNO Field Label LBL_CUSTNO XSD Tag_ CUSTNO Display Type Text Mem Type Database term Parent Field Related Field TextArea Rows Max/Decimals LOV_ACCOUNT | | Data Type Varchar2 V DataSource STTME_CUS Max Length 9 Feld Size Column stame Column stame Preview Value Preview Value Accessivey Code TerdArea Cots Max Val Mask Id Off Line LOV Name | T_GROUP | Popup Edit Regit Regured Visible Input by LOV Only Calender Tert Sered Multiple Uppercase Only LOV Validation Regit Not Reg in Xad Report Parameter Read Only | |
| CUSTNO RELATION Sovens FieldSets Actions California LaurchForms Summary | Peidset Name FBT_GROUP Custom Attributes Bind Variables Napping Biock Name ELK_CUSTONER | Ratum Fields | Image Source | Celaut tom LoV definit Ostatype STRING | on | |
| | | _ | | STRING | | |

4.8 Attaching Call forms

Maintenance Call forms can be attached to a maintenance screen. Refer the document <u>14-</u> <u>Development of Call Form.docx</u> for developing call forms

Attaching Call forms

- Add button to block to launch call form on button click.
 - Right click on Block
 - Select Add fields. Select fields and Add UI field's window will be launched
 - Select UI Fields tab. Click add row button. Enter button name and click ok.
 - Select display type as button and enter field label.

| Se | elect F | ields & Add UI Fields | | × |
|----|---------|------------------------|-----------|--------|
| ſ | DataS | ource fields UI Fields | | |
| | | | | |
| | | | + | |
| | | Field Name | Data Type | ^ |
| | V | BTM_MIS | • | |
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| | | | Ok | Cancel |
| | | | | |

Fig 12.24: Defining Button field

• Add Call form details to Call form node

| ction Generation | | | | | | | E 77 🧐 |
|------------------------------|-------------------|----------------------|--------------------|-----------------------|------------------------|-----------------|-------------|
| | | | | | | | |
| Action Load - | | Function Type Parent | _ | | Function Category Main | | |
| Function Id STDCIFD | | Parent Function | | | Header Template Nor | ie 🔻 | |
| Save XML Path STDCIFD_RAI | BROWSE | Parent Xml | | | Footer Template Main | nt Audit 👻 | |
| ch | Call Form Details | | | | | | ũ |
| Preferences | | | | | | | |
| DataSource TIM_CUSTOMER | | | | | Screen Arguments | Dependent | Fields+- |
| STTM_CUST_GROUP ListOfValues | Function ID | Parent Data Block | Parent Data Source | Relation | Relation Type | Callform Screen | Display 1 ^ |
| LOV_COUNRTY | MICCUSTM | BLK_CUSTOMER - | STTM_CUSTOMER - | TTM_CUSTOMER.COSTOMER | _NO = 🔁 🛛 One To One 🔹 | • • | Button |
| DataBlocks | | | | | | | |
| BLK_CUSTOMER | | | | | | | |
| CUSTNO | | | | | | | |
| | | | | | | | |
| ADDR1 | | | | | | | |
| CNTY CNTY | | | | | | | |
| 🚞 NLTY | | | | | | | |
| LANG | | | | | | | |
| BTM_MIS BLK_GROUP | | | | | | | |
| BLK_GROUP | | | | | | | |
| FieldSets | | | | | | | |
| a Actions | | | | | | | |
| CallForms | | | | | | | |
| 🚞 LaunchForms | | | | | | | |
| 🚞 Summary | | | | | | | |
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Fig 12.25: Defining details of the Call form to be attached in call form node

- Add event to button.
 - On selecting event type as call form or launch form or sub screen button will be displayed on bottom of the screen.
 - If user needs to place button position in desired place on the screen, event type should be Normal .User has to write code in release specific JavaScript file to launch the screen

| Function Generation | | | | | | _ > |
|---|--|--|----------------------|------------------|--|--|
| | | | | | 🔚 🗶 🔳 | 🞸 🍯 🔿 |
| Action Load 👻 | Function Type | Parent | - | Function Categor | y Maintenance 🔻 | |
| Function Id STDCIFD | Parent Function | | | Header Template | e None 🔻 | |
| Save XML Path STDCIFD_RAI | BROWSE Parent Xm | | | Footer Templat | e Maint Audit 👻 | |
| Search | Block Field Properties | | | | - [| u 🗖 🌶 |
| Preferences DataSource STTM_CUSTOMER STTM_CUSTOMER DataBlocks DataBlocks CUSTNO CUSTNO CUSTNO CUSTNO CUSTNO CUSTNYPE CUAME ADDR1 CUSTN CUSTYPE CUAME ADDR1 CUSTYPE CUST SCreens CUSTNO CUST | Field Name • BTM_MIS Field Label DataSource Column Name • Data Type • Display Type Parent Field Related Block Related Block Related Field LOV Name Off Line LOV Name Fieldset Name Custom Attributes Events Related Field | → → → + + + + + + + + + + + + + | | MIS | Required Visible Read Only Calender Popup Ed Uppercass LOV Valid. Required Input by L0 Not Requi Report Pa | Fext t Required e Only attion DV Only red In Xsd rameter |
| Summary Summary | | | | | | Ŧ |
| Fig 1 | 2.26: Defining event to | the butt | on such that call fo | orm is linked to | the button | |

• Check the preview.

| 🔶 Main | | | | × |
|--|-------------|----------------------------|------|---------|
| 🖹 New 🦻 <u>Enter Query</u> | | | | |
| Customer No Name Type Address | | | | |
| I≪ 1 of 1 ▶ ▶ | Go to Page | | +-== | |
| Group Id | Customer No | Relation | A | |
| < | | III | | |
| MIS Change Log | | | | |
| Maker | I | Date Time: | | |
| Checker | | Date Time: | Exi | t |
| Mod No | | cord Status tion Status | | |
| | | | | |

Fig 12.27: Preview of the screen with the Call Form button

4.9 Adding Summary

1) Add entry in Preferences node for Summary screen

| | | | | | X | I | F 🧐 | |
|--|------------------|--------------|--------------------|---------------------------------|-----------|----------|--------|---|
| Action Load - | Function Ty | rpe Parent 🔻 | | Function Category Maintenance 🔻 | | | | |
| Function Id STDCIFD | Parent Functi | ion | | Header Template None 👻 | | | | |
| Save XML Path STDCIFD_RAI | OWSE Parent X | (ml | | Footer Template Maint Audit | • | | | |
| earch P | references | | | | | | ت م | 9 |
| Carl Preferences | Field Office Fu | nction | Module | ST | | | | |
| DataSource DataSource DataSource | 🔽 Logging Requi | red | Module Description | Static Maintenance | | | | |
| GROUP | Auto Authorizati | ion | Branch Program Id | | | | | |
| ListOfValues | Tank Modificati | ons | Process Code | | | | | |
| 🗉 🛅 DataBlocks | Field Log Regu | iired | SVN Repository URL | | | | | |
| BLK_CUSTOMER | Multi Branch Ac | | Transaction Block | Choose Block 👻 | | | | |
| CUSTNO | Excel Export Re | | Name | | | | | |
| CUSTTYPE | | squileu | Transaction Field | Choose Field 👻 | | | | |
| ADDR1 | | | Name | | | | | |
| CNTY | | | | | | | | |
| 🗀 NLTY | | | | | Control S | tring 📕 | | |
| 🔁 LANG | | | | | Control C | ang 1 | | |
| BTM_MIS | Function Id | | Module * | Module Description | | | | |
| BLK_GROUP Screens | STDCIFD STDCIFD | ST | ×5 | Static Maintenance | | | | |
| CVS_MAIN | STSCIFD | ST | 25 | Static Maintenance | | | | |
| 🛙 🗀 FieldSets | | | | | | | - | |
| Cions Cions | | | | | | | | |
| CallForms | | | | | | | | |
| aunchForms | | | | | | | | |
| Canal Summary | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

- 2) Click on Summary Node.
 - Enter Summary title .Select label code from lov.
 - Select Data Block master block and summary blocks will be displayed. Select required block from drop down list.
 - Select Data Source for summary.
 - Select Summary Type.
 - Select Summary Screen size.
 - Enter if any where clause is required.
 - Enter Default order by if required.
 - Enter Multi Branch where clause if required.
 - Attach the fields required in the summary result grid
 - If the field is required as part of filtering, query has to be checked for the particular field
 - Provide the position of fields in Result grid and Summary Query set .

| | | | | | | | | | × | I 7 | |
|--|-------------------|--------------------------------|---|---|--|-------------|---------------------|---|---|------------|--|
| Action Load 💌 | | Function Type Parent | - | | | Function Ca | ategory Maintenance | - | | | |
| Function Id STDCIFD | | Parent Function | | | | Header Te | mplate None 👻 | | | | |
| Save XML Path STDCIFD_RA | BROWSE | Parent XmI | | | | Footer Te | mplate Maint Audit | • | | | |
| ch | Summary Detai | ls | | | | | | | | | |
| Preferences | ти | tle | | 1 | Default Where Clause | | | 2 | | | |
| DataSource | Data Bloc | | • | _ | Default Order By | | | 2 | | | |
| B D STTM_CUSTOMER | Data Sour | | • | | Multi Branch Where | | | 2 | | | |
| STTM_CUST_GROUP | | | • | | Clause | | | | _ | | |
| DataBlocks | Summary Typ | | • | | Main Summary Screen | | | | | | |
| BLK_CUSTOMER | Summary Screen Si | ze Medium | • | | | WebService | s | | | | |
| CUSTNO | | | | | | Required | | | | | |
| | Data Block Fields | Custom Buttons Fields Ordering | | | | | | | | | |
| | Data block Fields | Custom Buttons Fields Ordening | | | | | | | | | |
| ADDR1 | | | | | | | | | | | |
| | | | | | | | | | | | |
| CNTY | | | | | | | | | | | |
| MLTY | | Data Block Fields | | | Fields Selected | Query | LOV Name | | | | |
| INLTY | | Data Block Fields | | | | Query | LOV Name | | | | |
| INLTY LANG BTM_MIS | | Data Block Fields | | | CUSTNO | | LOV Name | • | | | |
| □ NLTY □ LANG □ BTM_MIS ⊕ □ BLK_GROUP | | Data Block Fields | | | | - | LOV Name | • | | | |
| NLTY LANG BTM_MIS BLK_GROUP Screens | | Data Block Fields | | | CUSTNO | | LOV Name | • | | | |
| NLTY LANG TH_MIS LK_GROUP SCreens CVS_MAIN | | Data Block Fields | | | CUSTNO CNAME | | LOV Name | 4 | | | |
| NLTY LANG BTM_MIS BTM_MIS Screens CVS_MAIN FieldSets Adtons | | Data Block Fields | _ | | CUSTNO CNAME CUSTTYPE ADDR1 | | LOV Name | | | | |
| NLTY LANG BTM_MIS BLK_GROUP Screens CVS_MAIN FicloSets Actions CaliForms | | Data Block Fields | _ | | CUSTNO CNAME CUSTTYPE ADDR1 | | LOV Name | | | | |
| NLTY LANG BTM_MIS BTM_MIS Screens CVS_MAIN FieldSets Adtons | | Data Block Fields | _ | | CUSTNO CNAME CUSTTYPE ADDR1 CNTY NLTY | | LOV Name | | | | |
| NLTY LANG BTM_MIS BLK_GROUP Screens GOV CVS_MAIN FieldSets Califorms LaunchForms | | Data Block Fields | _ | | CUSTNO CNAME CUSTTYPE ADDR1 CNTY NLTY | | LOV Name | | | | |

Summary Preview

Right click on summary node and click on preview.

| | auto Quesu C t Advence | d Search O Bee | et D Clear All | | | | | | | × |
|------|--|-----------------|----------------|------|------|------------|---------|-------------|----------|---|
| Exe | Advance Advance Advance Authorization Status Customer No | v search +5 Kes | | | Reco | ord Status | • | | | |
| Reco | rds per page 15 👻 📊 | 🛯 1 of 1 🕨 🔰 | | 2 | | | | | | * |
| | Authorization Status | Record Status | Customer No | Name | Туре | Address | Country | Nationality | Language | |
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| | | | | | | | | | Exit | |
| | | | | | | | | | | |

Fig 12.29: Summary Screen Preview

4.10 Amendable fields Maintenance

Amendable Fields

If user needs to modify data of a particular field on unlock, in Workbench developer has to maintain fields as amendable.

- Click ACTIONS node.
- Click on Amendables button next to the action for which the field has to be made amendable
- Select the fields in each block which user can modify for the selected action.

| Amendable DetailsQUERY | | × | | | |
|---------------------------|--|-----------|--|--|--|
| Data Blocks | DataBlock Fields | | | | |
| BLK_CUSTOMER BLK_GROUP | New Allowed Delete Allowed All Records | Mandatory | | | |
| | Field Name | Amendable | | | |
| | CUSTNO | | | | |
| | CUSTTYPE | | | | |
| | CNAME | v | | | |
| | ADDR1 | | | | |
| | CNTY | | | | |
| | NLTY | | | | |
| | LANG | | | | |
| | BTM_MIS | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | Ok Cancel | | | |
| | L | | | | |
| | | | | | |

Fig 12.30: Maintaining amendable fields

5. Generation and Deployment of files

Generate Files

• Click on generate button select the required files to generate and click on Generate button.

| ation | | × | 4 | lela Data | Others | |
|--|-------------------------------|--|--|---|--|--|
| Error Description Request successfully Processed | | Error Code RD-SAVE-007 | Menu Details Datasource Details LOV Details Block Details Screen Details | Label Cretails Lock PK Columns Function Call Forms Gateway Details Notification Details | Xads Xads Xad With Annotations Screen Html Upload Table Trigger Upload Tables Definition | |
| | | 0% of DownLoadFile from 10.184 | .132.100 Completed | nction Parameters | Archive Table Definition | |
| | | File Download | | X Hyb Levens | | |
| | | Do you want to open or sa | ve this file? | | | |
| | | Name: RAD.ZIP Type: WinRAR ZIP archive | | ые Туре | Status | |
| | | | | | Generated 👻 | |
| | | From: 10.184.1 | 32.100 | | Generaled * | |
| | | Op | oen Save Cancel | | Generated 👻 | |
| | | | | | Generaled * | |
| 5 STDCIFD_CVS_MAIN_TAB_F0OTER.html 6 sipks_stdbild_main.spc 7 stpks_sidbild_kernel.spc 8 slbks_stdbild_main.spl | | While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. <u>What's the risk?</u> | | ally | Generated 👻 | |
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| | slpks_stdcifd_main.sql | | SQL | - | Generaled * | |
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| | CSTB_OTHER_LABELSSTDCIFD INC | | INC | | Generated 👻 | |
| | CSTB_FID_CALLFORMSSTOCIFD.INC | | INC | | Generaled * | |

Fig 12.30: Generation of Files

Deploy files

• Click on deploy button select the required files to deployed to server and click on deploy. On successful deployment status will be displayed as Deployed.

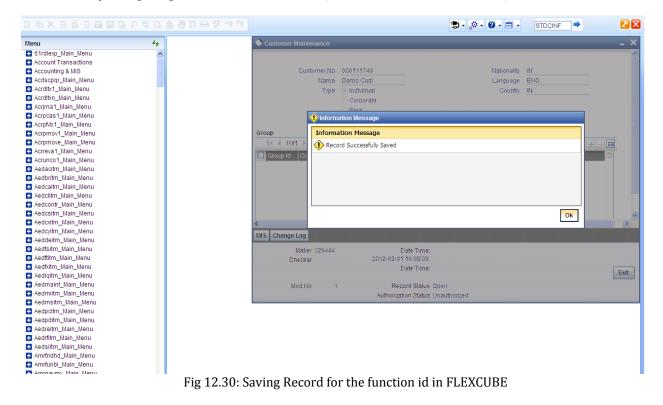
| Front-End Files | System Packages | Hook Packages | Me | ta Data | Others | ^ |
|---------------------------------------|---|--|---|---|--|---|
| RadXML Z Screen Xml Z System JS | Main Package Spec Main Package Body Notification Triggers Upload Package Spec Upload Package Body | Kemel Package Spec Kemel Package Body Cluster Package Spec Cluster Package Body Custom Package Spec Custom Package Body | Menu Details Datasource Details Datasource Details Diock Details Srceen Details Amendable Details Call form Details Summary Details | Label Details Jock PK Columns Houck PK Columns Gateway Details Notification Details Function Parameters Purge Details | Xsds Xsd With Annotations Screen Hmi Upload Table Trigger Upload Tables Definition Archive Table Definition | |
| 3 | CSTB_FIELD_LABELSSTDCIFD.INC | | INC | | Deployed ~ | ^ |
| ł | CSTB_OTHER_LABELSSTDCIFD.INC | | INC | | Deployed 👻 | |
| | CSTB_SUMMARY_INFOSTDCIFD.INC | | INC | | Deployed 👻 | |
| | STTB_AUDIT_PK_COLSSTDCIFD.INC | | INC | | Deployed 👻 | |
| | CSTB_FID_DATA_BLOCKSSTDCIFD.INC | | INC | | Deployed - | |
| | CSTB_FID_DATA_SOURCESSTDCIFD.INC | | INC | | Deployed 👻 | |
| | CSTB_FID_SCR_TABSSTDCIFD.INC | | INC | | Deployed 👻 | = |
| 0 | CSTB_FID_SCREENSSTDCIFD.INC | | INC | | Deployed 👻 | |
| 1 | SMTB_MENUSTDCIFD.INC | | INC | | Deployed 👻 | |
| 2 | SMTB_ROLE_DETAILSTDCIFD.INC | | INC | | Deployed 👻 | |
| 3 | SMTB_FUNCTION_DESCRIPTIONSTDCIFD. | NC | INC | | Deployed 👻 | |
| 4 | SMTB_FCC_FCJ_MAPPINGSTDCIFD.INC | | INC | | Deployed - | |
| 5 | STDCIFD RAD.xml | | RADX | ML | Generated ~ | - |

Fig 12.30: Deployment of Files

Testing

•

- Launch the screen from FLEXCUBE
- Try sample operations on the screen (NEW, MODIFY, QUERY etc)



6. Generated Units

The following units will be generated for a Maintenance screen.

Refer document <u>Development_WorkBench_Screen_Development-II.docx</u> for detailed explanation on the same

6.1 Front End Units

6.1.1 Language xml

This file is an XML markup of presentation details, for the designed Call Form specific to a language.

6.1.2 SYS JavaScript File

This JavaScript file mainly contains a list of declared variables required for the functioning of the screen

6.1.3 Release Type Specific JavaScript File

This file won't be generated by the Tool. It has to be manually written by the developer if he has to write any code specific in that release

6.2 Data Base Units

6.2.1 Static Scripts

The following static scripts generated are required for the proper functioning of a Call Form screen. Refer document on generated units for detailed explanation

i) Menu Details

Scripts for SMTB_MENU and SMTB_FCC_FCJ_MAPPING, SMTB_ROLE_DETAIL, SMTB_FCC_GCJ_MAPPING are required for the functioning of Maintenance screen

- ii) Lov Details
- iii) Amendable Details
- iv) Label details
- v) Screen Details
- vi) Block details
- vii) Data Source Details
- viii) Call form details
- ix) Summary Details

6.2.2 System Packages

The Main Package contains the basic validations and backend logic for the Maintenance function id. The Main package contains the mandatory checks required. It will also contain function calls to the other packages generated by Workbench.

The main package has the below stages for a maintenance form:

- Converting Ts to PL/SQL Composite Type
- Checking for mandatory fields
- Defaulting and validating the data
- Writing into Database
- Querying the Data from database

• Converting the Modified Composite Type again to TS

Each of these stages has a 'Pre' and 'Post' hooks in the Kernel, Cluster and Custom Packages. And these Hooks are called from the Main Package itself

Main Package has the system-generated code and should not be modified by the developer Kernel, Cluster and Custom Packages are the packages where the respective team can add business logic in appropriate functions using the Pre and Post hooks available

6.2.3 Hook Packages

Release specific packages will be generated based on the release type (KERNEL.CLUSTER or CUSTOM). Developer can add his code in the release specific hook package.

The Main Package has designated calls to these Hook Packages for executing any functional checks and Business validations added by the user. The structure for all the Hook Packages are the same, like:

Fn_Post_Build_Type_Structure Fn_Pre_Check_Mandatory Fn_Post_Check_Mandatory Fn_Pre_Default_and_Validate Fn_Post_Default_and_Validate Fn_Pre_Upload_Db Fn_Post_Upload_Db Fn_Pre_Query Fn_Post_Query

These Functions are called from the Main package using the Pre and Post Hooks available in the Main Package. The 3 Hook Packages namely Kernel, Cluster and Custom Packages have similar structure and are for the respective teams to work on.

6.3 Other Units

6.3.1 Xsd

Xsd 's will be generated if gateway operations are required for the particular function id. Maintenance for the same has to be done in *Actions* node

7. Extensible Development

Developer can add his code in hook packages and release specific JavaScript file.

7.1 Extensibility in JavaScript Coding

For release specific JavaScript coding, code has to be written in release specific JavaScript

file.

It follows the naming convention as : (Function Id)_(Release Type).js *Example: Code in STDCIFD_CLUSTER.js is exclusive to cluster release*

This JavaScript file allows developer to add functional code and is specific to release.

The functions in this file are generally triggered by screen events. A developer working in cluster release would add functions based on two categories:

- Functions triggered by screen loading events *Example: fnPreLoad_CLUSTER(), fnPostLoad_CLUSTER()*
- Functions triggered by screen action events *Example: fnPreNew_ CLUSTER (), fnPostNew_ CLUSTER ()*

7.2 Extensibility in Backend Coding

Release specific code has to be written in the Hook Packages generated.

7.2.1 Functions in Hook Packages

Different functions available in the Hook Package of a Maintenance Form are:

- 1) Skip Handler : Pr_Skip_Handler This can be used to skip the logic written in another release. *Example: logic written in KERNEL release can be skipped in CLUSTER release*
- 2) Fn_post_bulid_type_structure If any change has to be made in the field values obtained from the form befor start of processing, code can be written here
- 3) Fn_pre_check_mandatory
- 4) Fn_post_check_mandatory

Any extra mandatory checks on the field values from the screen can be written here.

- 5) Fn_pre_query
- 6) Fn_post_query

Any specific logic while querying can be written in these functions. It is called from fn_query of the main package

- 7) Fn_pre_upload_db
- 8) Fn_post_upload_dbAny logic while uploading data to tables can be written here .

9) Fn_pre_default_and_validate

10) Fn_post_default_and_validate

Any release specific logic for defaulting and validation can be written here . It is called from the fn_default_and_validate in the main package

7.2.2 Flow of control through Hook packages

The flow of control through the Hook Packages for a particular stage is as explained in the figure below

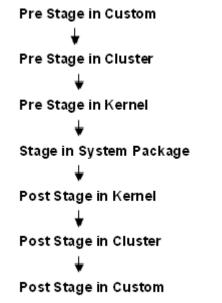
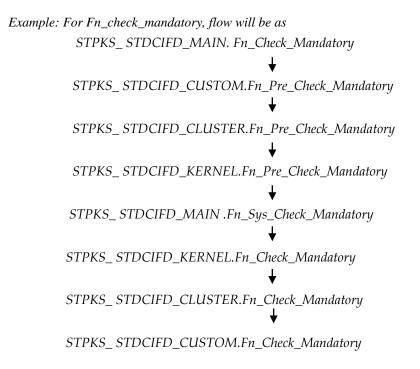


Fig 12.31: Flow of control through Hook Packages



7.2.3 By passing Base Release Functionality

There are auto generated functions like FN_SKIP_<RELEAE_TYPE> which would determine whether or not a particular hooks needs to be called.

Developer also has an option to bypass the base release hook if need be. For example if the validations written in *STPKS_STDCINF_KERNEL.FN_PRE_CHECK_MANDATORY* are not required or not suitable for the Cluster release, system provides an option to bypass the code written by Kernel team. Similarly a Custom release can also bypass the code written by Kernel and Custom Releases. This can be achieved by calling procedures

PR_SET_SKIP_<RELEASE_TYPE> and *PR_SET_ACTIVATE_<RELEASETYPE>*. These procedures will be made available in the main package and the development teams of Customization teams can use these procedures to skip and re-activate the hooks of parent release.

The Developer should avoid adding validations or Checks in the Pre Stage of any function, like Fn_Pre_Check_Mandatory, etc and should aim to add all the validations in the Fn_Post_Default_and_Validate.

For Example let us see the flow for the Mandatory Stage for STDCIFD:

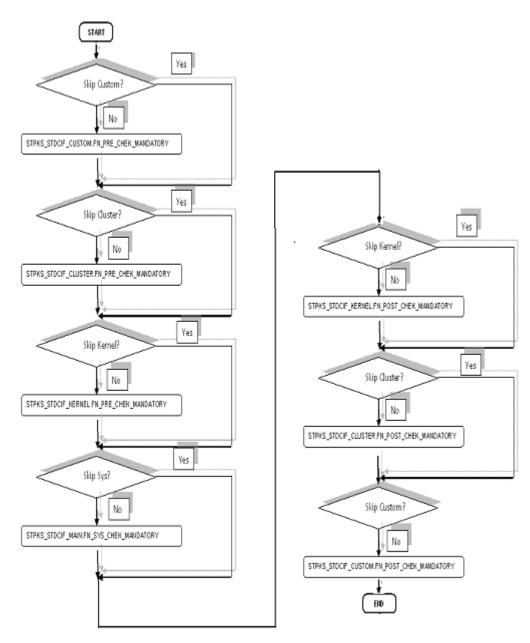


Fig 12.31: Flow of control explaining skip logic in pacakges



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